



Docket No. 24061.150/TSMC2003-0964
Customer No. 42717

UNITED STATES PATENT AND TRADEMARK OFFICE

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|---------------------------------------|---|-------------------------------------|
| Applicant: Chien-Chao Huang, et al. | § | Docket No.: 24061.150/TSMC2003-0964 |
| | § | |
| Serial No.: 10/824,854 | § | Examiner: To Be Determined |
| | § | |
| Filed: April 15, 2004 | § | Art Unit: 2812 |
| | § | |
| For: Method of Manufacturing a | § | Conf. No.: 6844 |
| Microelectronic Device with Electrode | § | |
| Perturbing Sill | § | |

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL SHEET TO POWER OF ATTORNEY

In accordance with 37 CFR 1.32 (c)(3) and with reference to the accompanying Power of Attorney, please recognize the following ten patent practitioners as being of record in this application.

| Name | Registration Number |
|-------------------|---------------------|
| David M. O'Dell | 42,044 |
| Jeffrey M. Becker | 35,442 |
| Timothy F. Bliss | 50,925 |
| Andrew S. Ehmke | 50,271 |
| Dave R. Hofman | 55,272 |
| Wei Wei Jeang | 33,305 |
| Julie M. Nickols | 50,826 |
| J. Andrew Lowes | 40,706 |
| T. Murray Smith | 30,222 |
| Chien Wei Chou | 41,672 |

Respectfully submitted,

David M. O'Dell
Registration No. 42,044

Dated: 8-25-04

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Certificate of Mailing

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

Bonnie Boyle
Name

8-25-04
Date



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | | | |
|---------------------------------------|---|----------------------|---------------|
| In re application of: | § | Attorney Docket No.: | 24061.150 |
| Chien-Chao Huang | § | | TSMC2003-0964 |
| | § | | |
| Serial No.: Unknown | § | Customer No. | 27683 |
| | § | | |
| Filed: Herewith | § | Group Art Unit: | Unknown |
| | § | | |
| For: Method of Manufacturing A | § | Examiner: | Unknown |
| Microelectronic Device With Electrode | § | | |
| Perturbing Sill | § | | |

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

POWER OF ATTORNEY FOR PATENT APPLICATION

As a representative of the Assignee, Taiwan Semiconductor Manufacturing Company, Ltd., I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

David L. McCombs (Reg. No. 32,271); Jeffrey M. Becker (Reg. No. 35,442); James R. Bell (Reg. No. 26,528); Timothy F. Bliss (Reg. No. 50,925); Randall C. Brown (Reg. No. 31,213); Randall E. Colson (Reg. No. 40,566); Michael A. Davis, Jr. (Reg. No. 35,488); Andrew S. Ehmke (Reg. No. 50,271); Priscilla Ferguson (Reg. No. 42,531); Sarah T. Harris (Reg. No. 35,891); William E. Hickman (Reg. No. 46,771); David R. Hofman (Reg. No. P-55,727); Rita M. Irani (Reg. No. 31,028); Wei Wei Jeang (Reg. No. 33,305); Warren B. Kice (Reg. No. 22,732); J. Andrew Lowes (Reg. No. 40,706); Todd Mattingly (Reg. No. 40,298); Julie Nickols (Reg. No. 50,826); Gloria Norberg (Reg. No. 36,706); David M. O'Dell (Reg. No. 42,044); T. Murray Smith (Reg. No. 30,222); and Chien Wei Chou (Reg. No. 41,672).

Please address all correspondence and telephone calls regarding this application to:

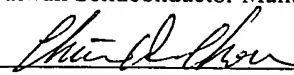
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The undersigned is the representative for the Assignee of the entire right, title, and interest in the patent application identified above. A copy of the assignment or other documents in the chain of title are attached.

The undersigned (whose title is supplied below) is authorized to act on behalf of the Assignee.

Taiwan Semiconductor Manufacturing Company, Ltd.

Date


Chien-Wei Chou
Title: Director, IP Division

ASSIGNMENT

WHEREAS, we,

- | | | | |
|-----|------------------|----|---|
| (1) | Chien-Chao Huang | of | 6F-1, No. 32, Ti-Yu Street Hsin-Chu 300, Taiwan |
| (2) | Cheng-Kuo Wen | of | 4F-2, No. 30, Lane 59, Jiangong 1 st Rd. Hsin-Chu 300, Taiwan |
| (3) | Fu-Liang Yang | of | 7F-3, No. 68, University Road Hsin-Chu City, Taiwan |

have invented certain improvements in

**METHOD OF MANUFACTURING A MICROELECTRONIC DEVICE WITH
ELECTRODE PERTURBING SILL**

for which we have executed an application for Letters Patent of the United States of America,

 of even date filed herewith; and
 X filed on April 15, 2004 and assigned application number 10/824,854; and

WHEREAS, we authorize the attorney of record to update this document to include Patent Office information as deemed necessary (i.e., filing date, serial number, etc.);

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd., ("TSMC"), No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park Hsin-Chu, Taiwan 300-77, Republic of China. is desirous of obtaining the entire right, title, and interest in, to and under the said invention and the said application in the United States of America and in any and all countries foreign thereto;

NOW, THEREFORE, for One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration, we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said TSMC, its successors, legal representatives, and assigns, the entire right, title, and interest in, to and under the said invention, and the said application, and all divisional, renewal, substitutional, and continuing applications thereof, and all Letters Patent of the United States of America which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may be filed for said invention in any country or countries foreign to the United States of America, and all extensions, renewals, and reissues thereof, and all prior patents and patent applications from which a filing priority of the above-described patent application may be obtained, including the right to collect past damages; and we hereby authorize and request the Commissioner of Patents of the United States of America, and any official of any country or countries foreign to the United States of America, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said TSMC, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to said TSMC, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, renewal, substitutional, continuing, and reissue applications, make all rightful declarations and/or oaths and generally do everything possible to aid the said TSMC, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

Inventor Name: Chien-Chao Huang

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Dated: Apr. 20, 2004

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Dated: Apr. 20, 2004

Fu-Liang Yang
Inventor Signature

R-72334.1